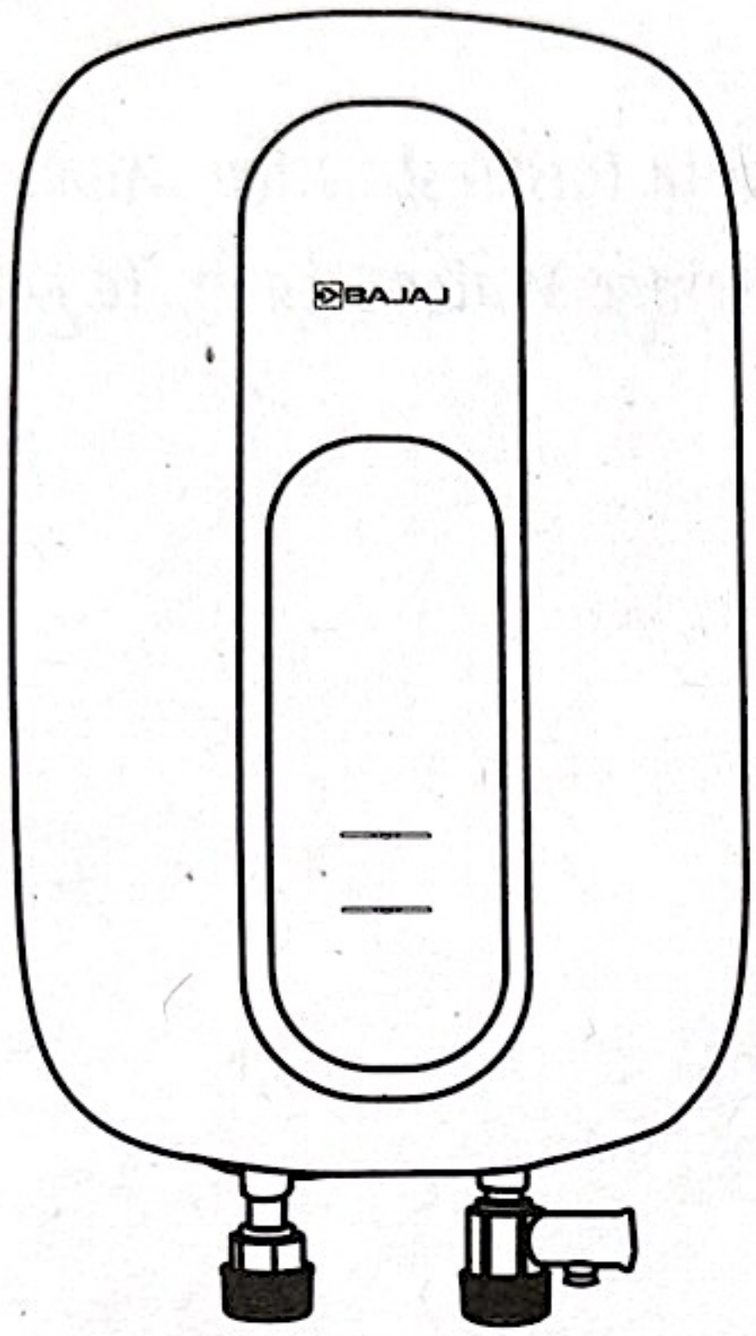
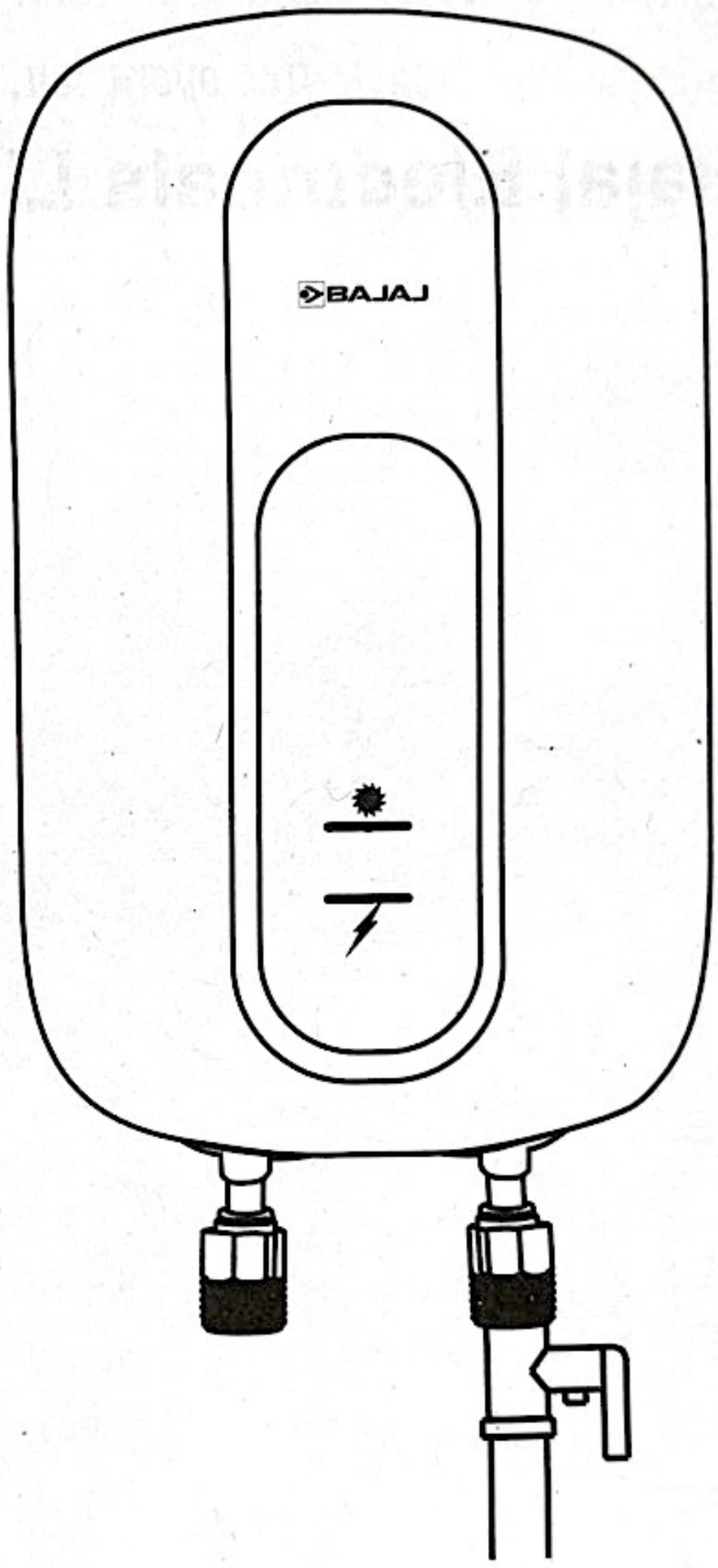
BAJAJ
BUILT FOR LIFE

INSTRUCTION MANUAL
INSTANT WATER HEATER

RoHS



3L 3kW



5.9L 3kW

AQUAQUICK
INSTANT WATER HEATER

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Dear Consumer,

Thank you !

For choosing Bajaj Instant/Storage Water Heater of which You are now the proud owner.

Please read and follow all the instructions given in this Instruction Manual carefully, prior to using your Bajaj Instant/ Storage Water Heater, to get the best mileage and trouble free operation.

Bajaj Electricals Limited

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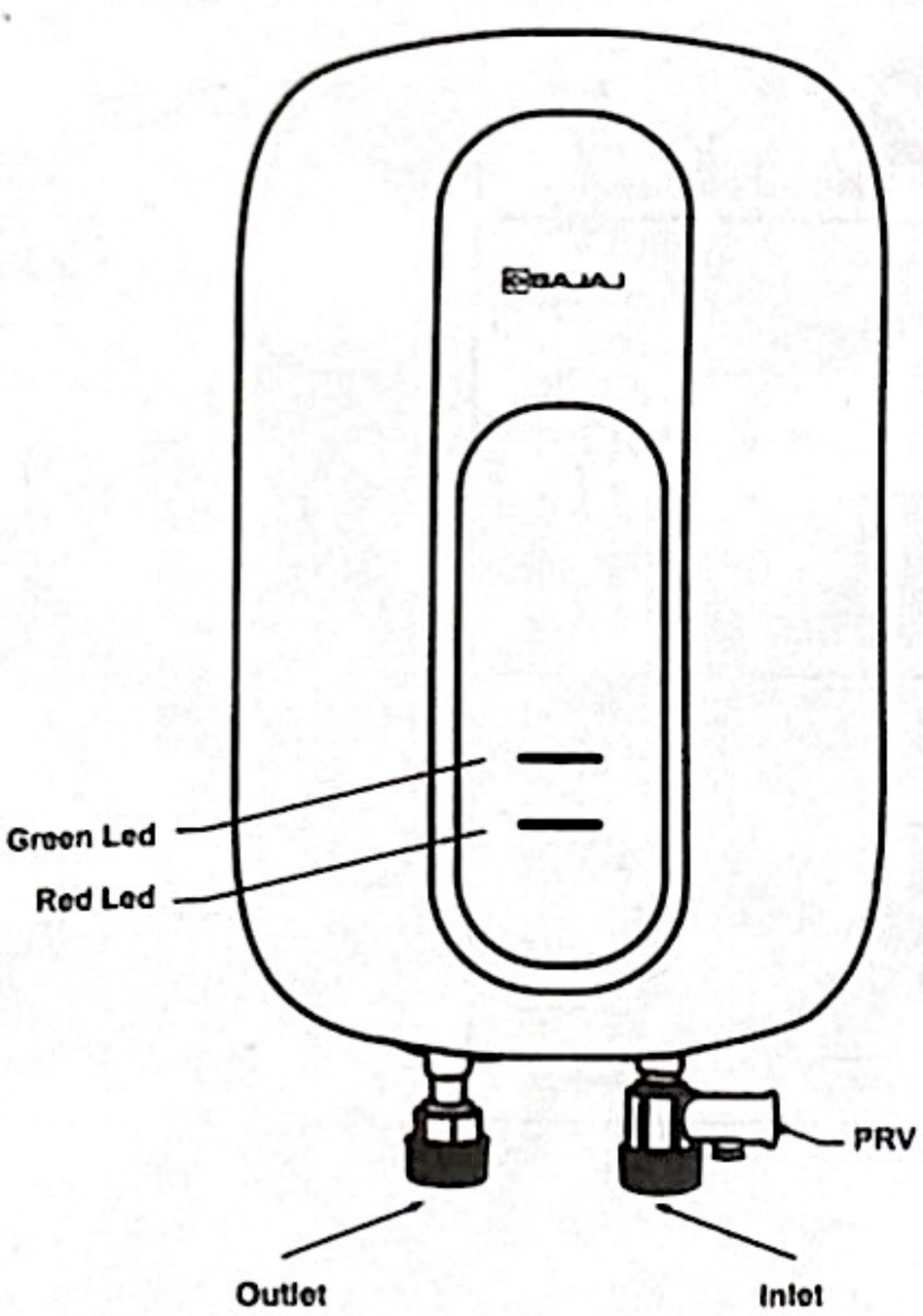
KNOW YOUR BAJAJ WATER HEATER

1. Every Bajaj Instant water heater is made of:
   a. Outer body, inner tank, heating element
   b. Safety device like safety valve, thermostat, thermal cut out .
   c. LED indicating lamps & control devices.
   d. ISI marked power cable

PART DESCRIPTION



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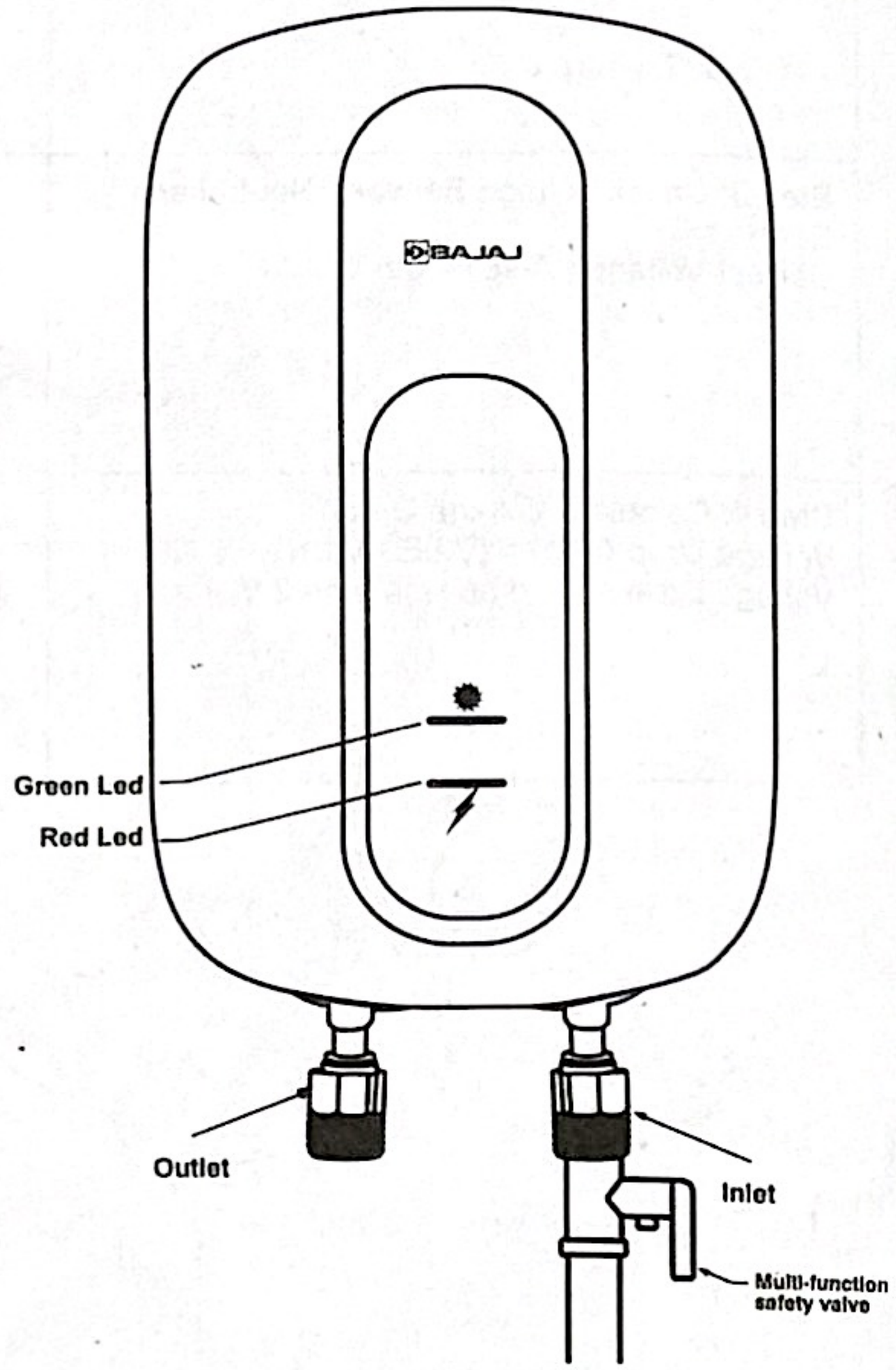

5.9L 3kW

(Fig. 1)

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OUTER BODY is made from rust proof & shock proof engineering plastic.

INNER TANK made of Stainless Steel suitable for both hard and soft water, the tank is tested to a pressure that is more than twice the normal working pressure.

HEATING ELEMENT direct immersion & mineral filled element housed in copper tube is used. Highly efficient, it is marked with Bajaj & ISI.

LED (S) direct Red & Green indicating lamps mounted on the heater unit, indicate the working of the thermal cutout and thermostat respectively. Operation of all these lamps is explained in

For safety devices : Thermal cut out, Thermostat and Safety valve

CAUTION: This is the most important pre-calibrated safety device provided with a water heater to safeguard against increasing pressure. Complete care is taken in the manufacturing & testing process to ensure long term smooth operation of this device. This is pre-set, sealed & tamper proof device that must purge & release excess Pressure.

▶ DO NOT TAMPER WITH THIS DEVICE IN THE INTEREST OF YOU & YOUR FAMILY'S SAFETY. ANY TAMPERING WITH THE SETTING CAN BE HAZARDOUS. WARRANTY IS VOID IF THE SETTING IS TAMPERED.

THERMOSTAT & THERMAL CUT OUT: These are primary & secondary temperature control devices meant to regulate the temperature within safe limits. Thermostat is the primary automatic temperature control device that regulates the temperature at the pre-fixed limit. Thermal cutout is a manually re- settable & secondary back up temperature Control device to prevent overheating in case the thermostat fails to operate. This device also helps to prevent dry heating of the element in case water heater is operated without water.

NON-RETURN FUNCTION

For 3L model the non-return function is integrated with inlet pipe

For 5.9L model the non-Return function integrated in Multi-function valve.

This Instant Water Heater /Storage Water Heater is suitable for inlet water pressure between 0.01Mpa to 0.02Mpa maximum. if the inlet pressure is more than 2 bar an appropriate rating pressure reducing valve (PRV) needs to be installed. For better results, the PRV should be installed at least 15 feet away from the water heater inlet.

Please note that, the Pressure release valve (PRV) – provided with 3L geyser protects the water heater from excess pressure built-up (over 6 bar)

It is recommended that the maximum line pressure of water at the inlet / plumbing system is checked. **Special care needs to be taken while installing water heater in multi-storied buildings OR at locations where hydro-pneumatic water pumping systems are used to supply water.**

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INSTALLATION (fig.2)

A. **Always get a qualifled plumber/ electrician to install the unit.**
B. Fix the water heater in a perfectly straight position at a suitable height from the floor or on the loft, with bolts.
C. There should be enough space around the heater for easy installation and servicing.
D. Make sure that supporting walls or fixtures are strong enough to carry the weight of the heater when it is completely filled with water.
E. Installation diagrams with dimensions for various configurations are shown in figure 2.
F. The heater should be saved from being damaged by splashing water. For this keep a minimum distance of 1 .8m between the floor & bottom of the heater.
G. During installation & plumbing (preferably by flexible metal pipes) connect the plumbing by bending the flexible pipes or elbow.
H. This Instant Water Heater /Storage Water Heater is suitable for inlet water pressure between 0.01Mpa to 0.02Mpa maximum. if the inlet pressure is more than 2 bar an appropriate rating pressure reducing valve (PRV) needs to be installed. For better results, the PRV should be installed at least 15 feet away from the water heater inlet.

WATER SUPPLY

A. You can connect the heater directly to the overhead water supply tank. D0 NOT CONNECT THE HEATER DIRECTLY TO WATER LIFTING PUMPS.
B. The water pressure also should not be too low. The minimum height between the heater & water supply should be at least 2 metres.

WATER CONNECTIONS

Do not connect the cold & hot water pipelines directly to the heater. Instead connect them using flexible copper pipes. Never use plastic tubes especially at the outlet, as it cannot withstand heat over extended usage. In case of direct pipe connections, tightening of couplings using wrench can damage the heater unit. Always use control /gate valves at the inlet & outlet. Ensure that valve at the inlet is always open.

ELECTRICAL WIRING (Fig.3)

All the electrical connections inside the heater are done at the factory. The water heater is provided with a supply cable (ISI marked Fire retardant). This should be connected to the main power supply. Make sure that connections in the plug & socket are secure & proper earthing is provided to the unit. Since the instant water Heaters draw large power,

For 3Kw power rating - It is mandatory to use 16≥Amps MCB for providing the power supply.
For 4.5Kw power rating - It is mandatory to use 25≥Amps MCB for providing the power supply.

Disconnection incorporated in the Fixed wiring to be provided.
For detailed specifications & dimensions please refer technical specification table.

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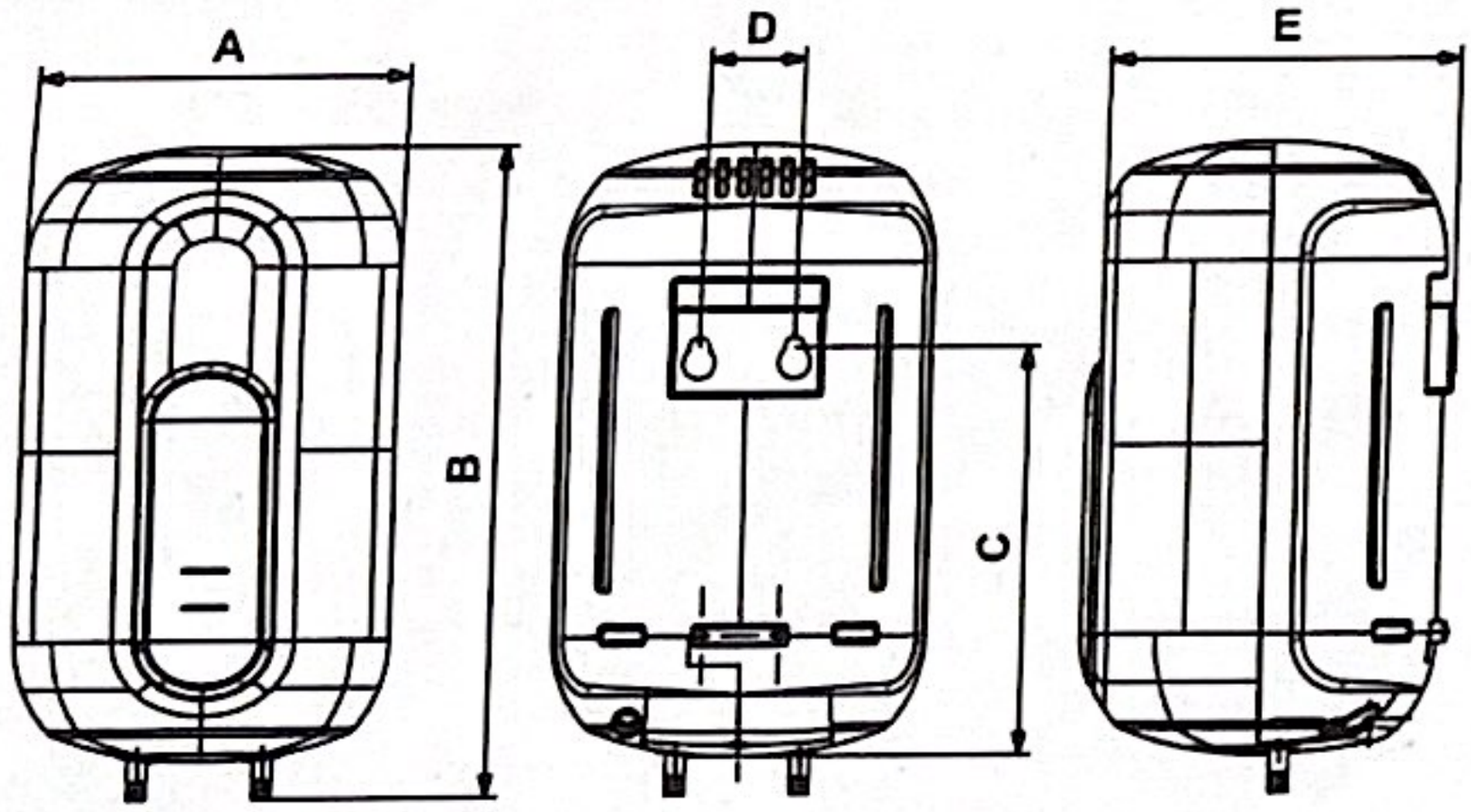
▶ Mounting Diagram - (fig 2)

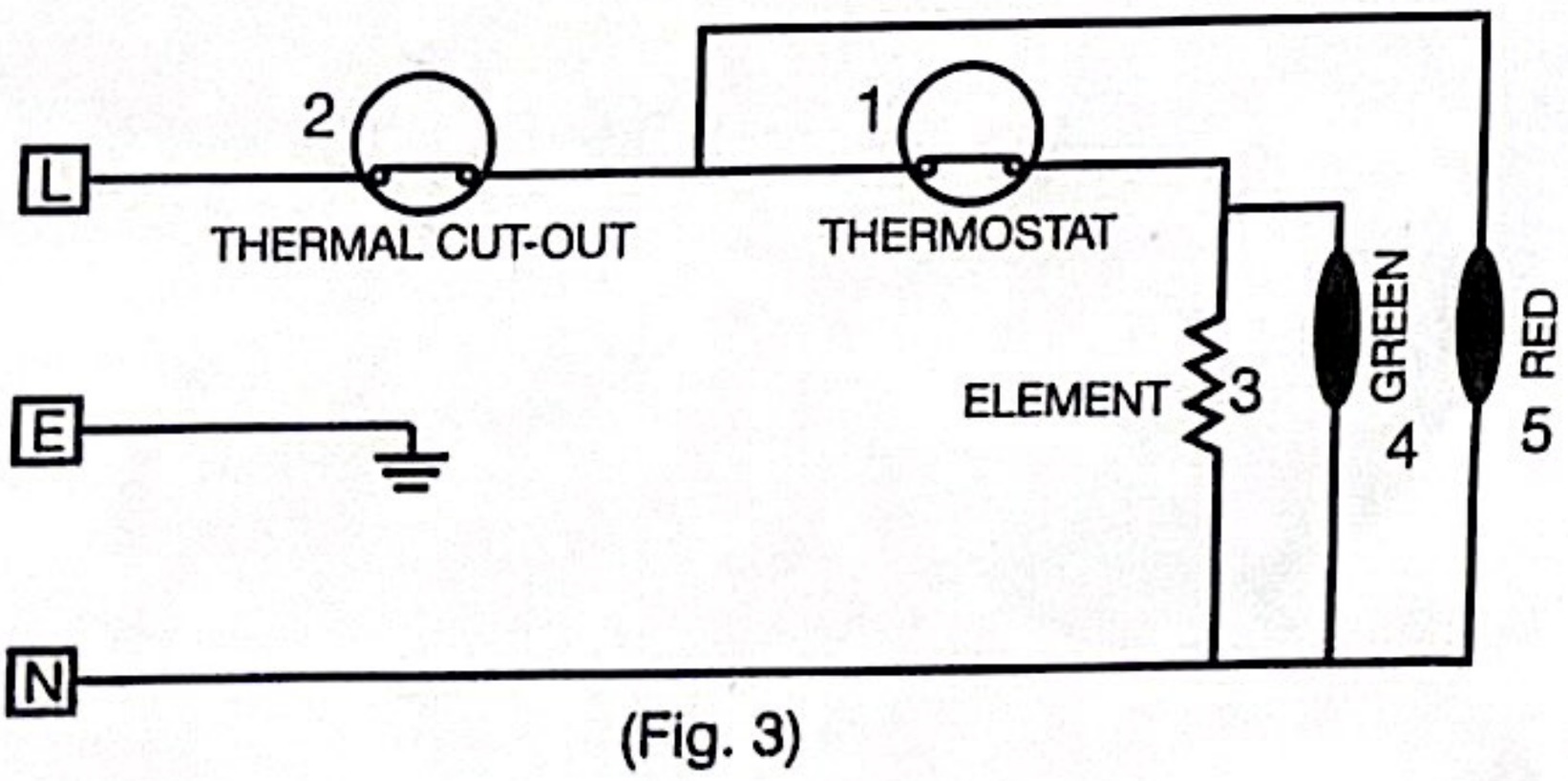


▶ TECHNICAL SPECIFICATION TABLE

Range / Models	Class	Configuration	Capacity (in L)	Wattage (in kW)	Dimensions (in mm)					
					A	B	C	D	E	F
Aquaquick 3L 3kW	I	Vertical	3	3.0	190	370	250	50	187	
Aquaquick 5.9 L 3kW	I	Vertical	5.9	3.0	240	455	292	50	225	

- *Refer the overall dimensions with the respective mounting diagrams.*
- *Range / Models indicated above are subject to availability.*
- *All pipe connections are ½" BSP.*
- *Due to continues efforts for improvement, specifications are subject to changes.*

▶ ELECTRICAL WIRING DIAGRAMS - (fig. 3)



(Fig. 3)

1. Thermostat
2. Thermal Cut Out
3. Element
4. Green LED
5. Red LED

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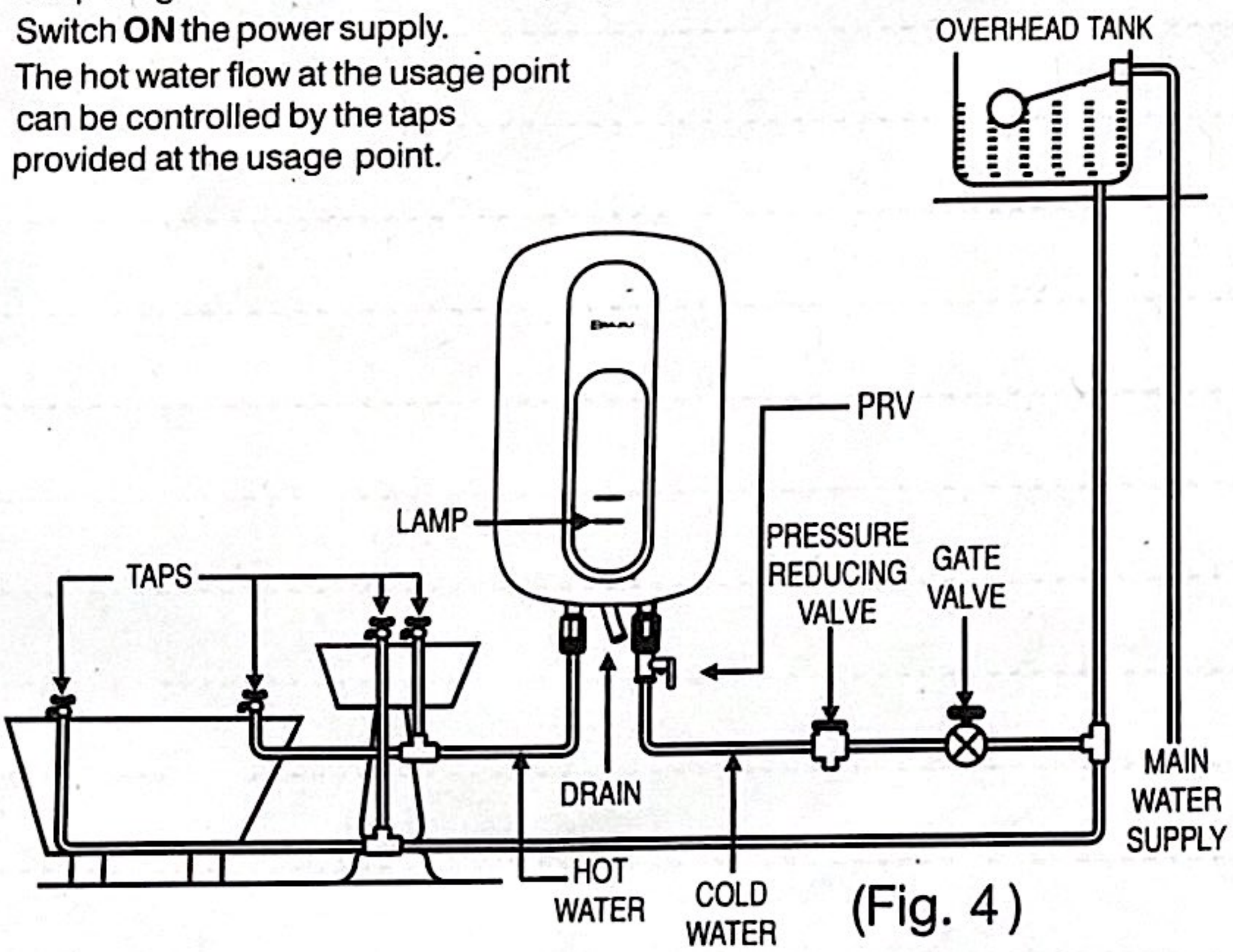
▶ How to Operate (Pressure type installation) (figure 4)

1. With this installation, you can take hot water out at more than one point of usage.
2. Allow the cold water to flow from the outlet.
3. Keep the gate valve at the inlet always open.
4. Switch **ON** the power supply.
5. The hot water flow at the usage point can be controlled by the taps provided at the usage point.



(Fig. 4)

Thermostat and thermal cut out, the glowing of red lamp, indicates power supply is available to the unit. The switching **ON** and **OFF** of the green lamp indicates the working of the thermostat.

If both lamps do not glow then.

- There is no power supply to the unit, or
- Water has reached boiling point as thermostat has failed as thermal cut out has operated, or
- The unit has been operated without water and thermal cut out has operated. In such as case contact nearest Bajaj Customer Care Center

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▶OPERATING INSTRUCTION BEFORE FIRST USE

1. **Ensure that the water heater is filled** with water. Connect the water inlet to the line plumbing and with the outlet open let water flow in the water heater, When the tank is full (this is clear when water starts flowing out through the outlet) close the outlet & switch **ON** the power supply to the unit.
2. When power is switched ON, it is indicated by glowing of both the GREEN and RED lamps. The heating element heats water, and at the preset temperature the thermostat switches OFF the supply. This is indicated by the GREEN lamp switching OFF (Red lamp continues to be ON). In a rare case when the thermostat fails, the thermal cutout provided as a back-up safety, operates and the heating stops (both RED and GREEN lamps are OFF). In case both the thermostat and thermal cutout fails, Multi-Function valve operates and releases hot water / steam in Aquaquick 3L & 5.9L.
3. You can now take the water out through the outlet. Due to the design of heater & displacement principle, fresh cold water enters the tank through the inlet. You can get the hot water as desired by controlling the flow of the water. Greater the flow rate, lesser is the temperature of the water & vice versa.
4. As the temperature of water inside the tank drops, thermostat again switches **ON** the power supply to the unit.

   This process continues till main power supply to the unit is switched **OFF** after usage.
5. During normal functioning, the lamp(s) will glow. In case they do not, contact the nearest Authorised Bajaj customer care centre.
6. Warranty is void if MFV is not installed at the inlet pipe.

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▶DO'S

1. To minimize scaling of heating element & the tank, which happens more in areas with hard water, drain the water from heater unit periodically. However get this done through a qualified technician only.
2. Always get the unit serviced once in a year.
3. Use genuine spare parts when replacement is necessary.
4. In case both the lamps do not glow, do not start the unit by resetting the thermal cutout. Instead contact the nearest Authorised Bajaj customer care centre
5. Always drain out the water when the unit is not in use for extended periods. This prolongs the life of the element.
6. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

▶DON'TS

1. **SAFETY DEVICES LIKE SAFETY VALVE, THERMOSTAT AND THERMAL CUT OUT ETC ARE PRE- SET & SENSITIVE DEVICES. D0 NOT TAMPER WITH THEM. THIS COULD BE HAZARDOUS.**
2. Do not switch ON the heater till it is completely filled with water.
3. In case you observe any abnormality of operation or sound coming from inside the water heater, immediately switch OFF the main power supply to the unit & contact the nearest Authorised Bajaj customer care centre
4. Never install a pressure reducer valve at the inlet.

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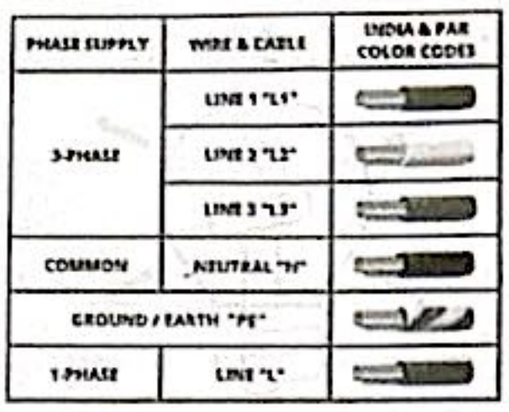
Do's

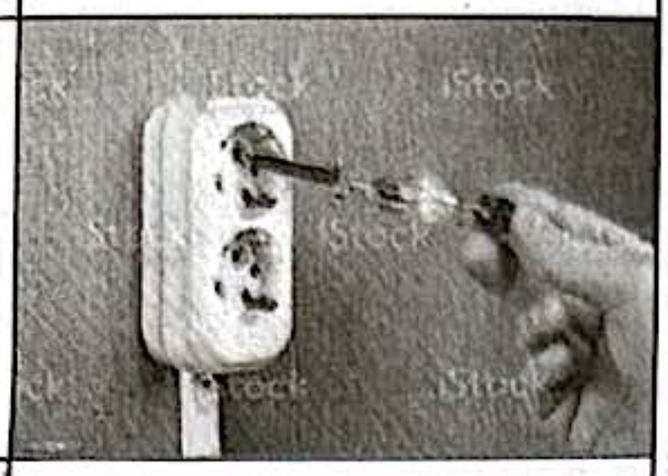
1. Know the wire code of your country.

Phase supply	Wire Color Code
3 phase	L1: Red
	L2: Yellow
	L3: Blue
Common	Neutral: Black
Ground / Earth	Combination Yellow and Green
1 Phase	L : Red



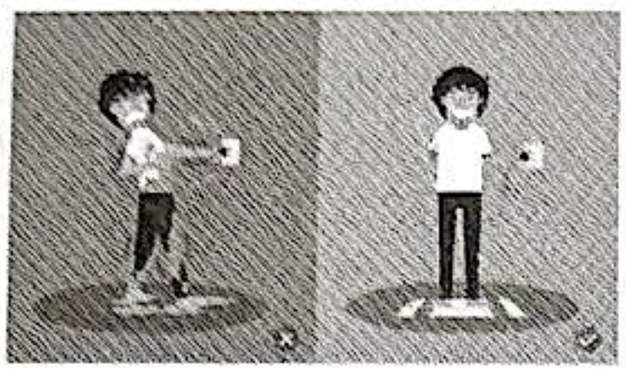
2. Check the pressure release valve / multifuntion safety valve installed at inlet pipe.

3. Avoid contact with energized electrical circuits, always check that it is de- energized first by using a tester.

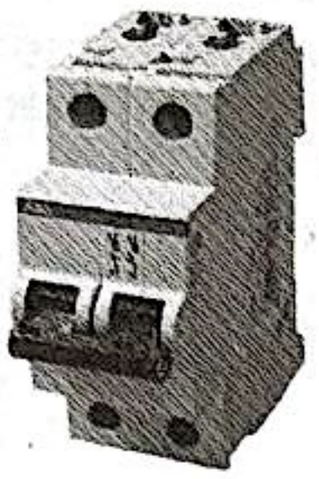


4. Always check Mg anode inside the water heater and replace it found corroded or Consumed.

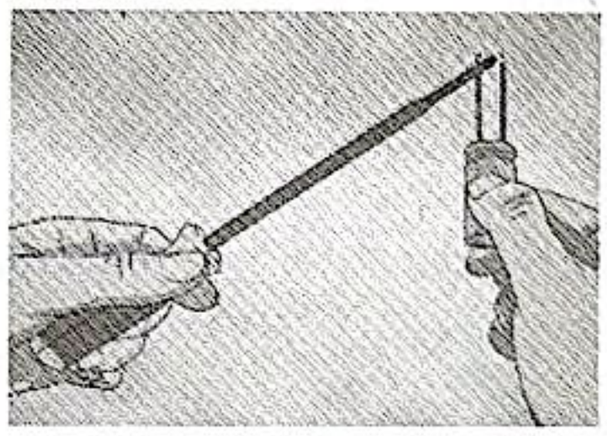
5. Never touch or try repairing any electrical equipment or circuits with wet hands. It increases the conductivity of electric current.



6. Always use a MCBs with the appropriate current rating. Follows recommended MCB as mentioned in installation.



7. Drain the capacitors before start of working by shorting the terminals to discharge to prevent electrical shock.



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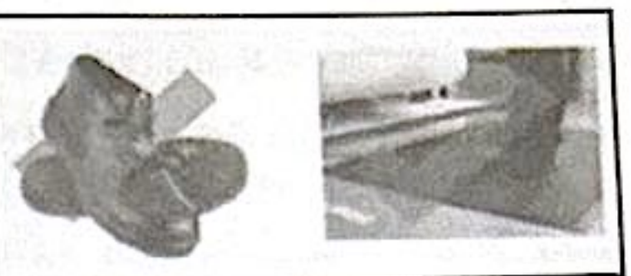
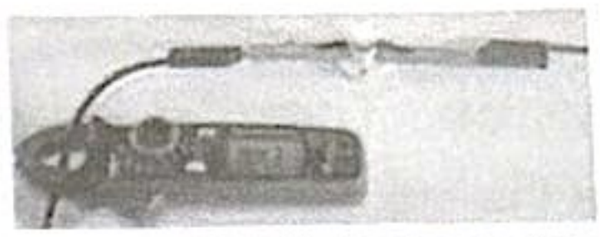
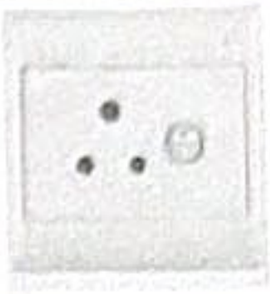
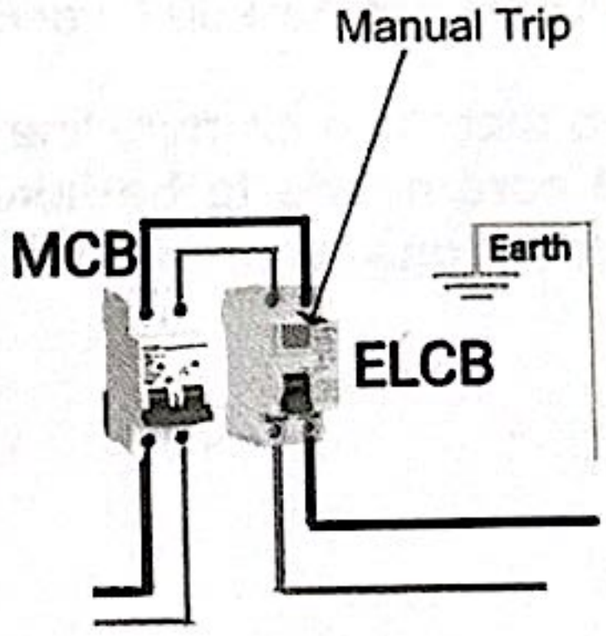
Do's

8. It is desirable to use standardized rubber matts and appropriate non-conductive safety shoes while working on electrical area.	
9. Check the current consumption of equipment by clamp meter. The current consumption should be as specified.	
10. Always check all electrical connections are properly fixed, no loose wiring allowed.	
11. Always Check the inlet water pressure, it should be between 0.01MPa to 0.02MPa maximum.	
12. Always Check the plug socket / MCB rating is appropriate (as per manufacturers recommendation) or not.	
13. Disconnect the power source before servicing or repairing electrical equipment.	
14. Use of ELCB (30mA) with appropriate current rating is recommended for protection against earth fault. 15. Test your circuit breaker. A manual trip test can be done by pressing the test button of the circuit breaker on your home's distribution box. It should trip when the button is pressed. 16. The supply socket must be earthed reliably. The rated current of the socket shall not be lower than 16 A. The socket and plug shall be kept dry to prevent electrical leakage	

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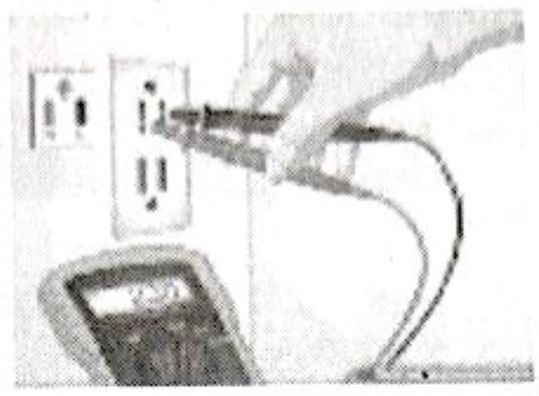
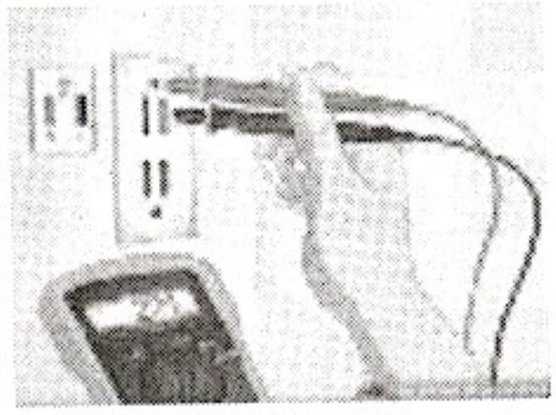
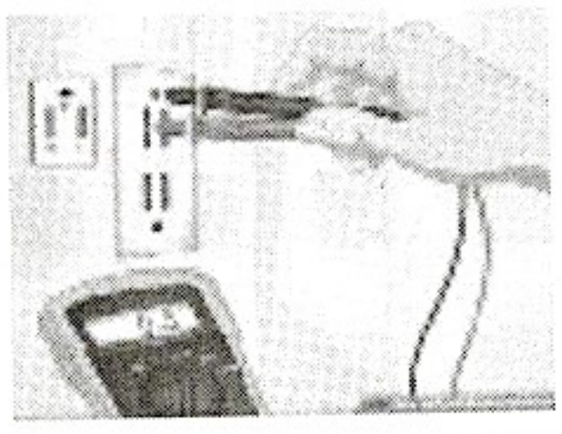
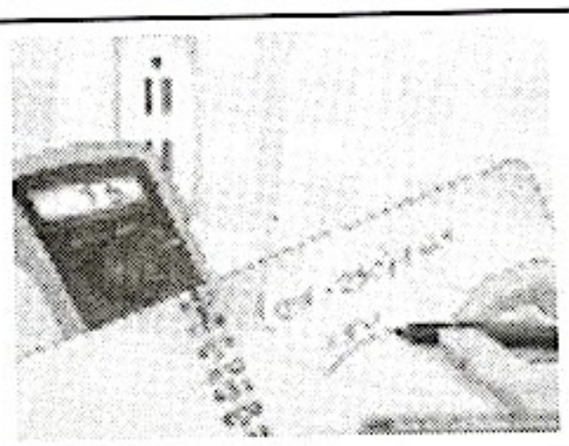
Do's

17. Check the Voltage Drop	
Step 1: Check Voltage Between Line and Neutral. Correct voltage (V LN) = 230±10V	
Step 2: Check Voltage Between Line and Earth. Correct voltage (V LE) = 230±10V	
Step 3: Check Voltage Between Neutral and Earth Correct Voltage (V NE) = 0.5 V	
Step 4: Calculate Voltage Drop Voltage Drop (V D) = (V LE - V LN) + V NE Voltage Drop should be less than 2 V	

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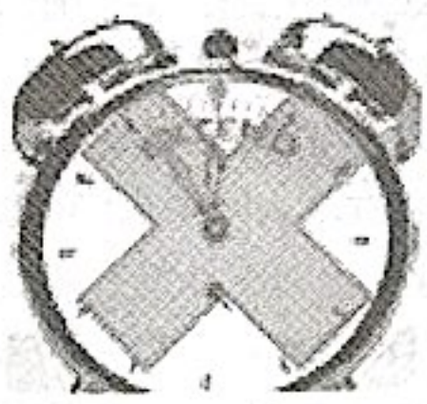
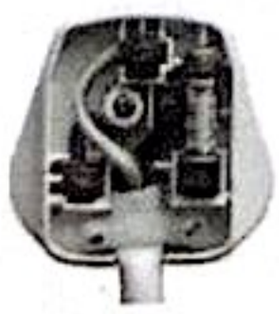
Don'ts

1. Do not keep the geyser switched ON when not in use.	
2. Never use metallic pencils or rulers, or wear rings or metal watchbands when working with electrical equipment.	
3. Do not rely on grounding to mask a defective circuit nor attempt to correct a fault by insertion of another fuse or breaker, particularly one of larger capacity.	
4. Never make joints of wires it may get loose.	
5. Never use equipment with frayed cords, damaged insulation or broken plugs.	
6. Never touch exposed wire by hands, use proper safety tool to operate.	
7. Never tamper with any designed settings of the pressure release valve / multifunction Safety Valve.	
8. Do Not Use Fusible Plug	

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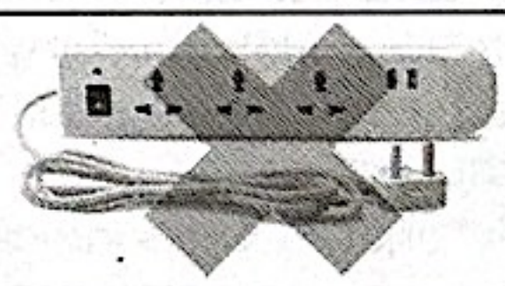
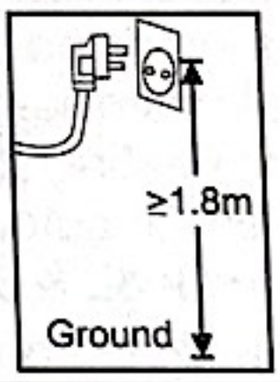
Don'ts

9. Do not use extension boards. Incorrect installation and use of the water heater may result in serious injuries and loss of property	
10. The installation height of the supply socket shall not be lower than 1.8 m	
11. Do not wire a three-pin plug to a water heater above 3KW input rating. Three-pin plugs can support currents of only up to 13A whereas Water heaters above 3Kw draw currents more than 16A.	

Warning :

1. The supply socket must be earthed reliably. The socket & plug must be kept dry to prevent electric shock.
2. Installation must be done by authorized service technician of the company.
3. Never temper with any designed settings of the pressure release valve, multi-function safety valve.

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